

**Amendment.**

**In the Claims:**

This list of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled).
2. (Cancelled).
3. (Cancelled).
4. (Cancelled).
5. (Cancelled).
6. (Cancelled).
7. (Cancelled).
8. (Cancelled).
9. (Cancelled).
10. (Cancelled).
11. (Cancelled).
12. (Cancelled).
13. (Cancelled).
14. (Cancelled).

15. (Cancelled).
16. (Original) An anode of an electrochemical cell, wherein said anode comprises:
  - (a) an anode active layer comprising lithium metal co-deposited in-situ with one or more gaseous materials; and
  - (b) a substrate.
17. (Original) The anode of claim 16, wherein said one or more gaseous materials are selected from the group consisting of carbon dioxide, acetylene, nitrogen, ethylene, sulfur dioxide, and hydrocarbons.
18. (Original) The anode of claim 16, wherein said gaseous material is carbon dioxide.
19. (Currently Amended) The anode of claim 16, wherein said substrate ~~of step (b)~~ is selected from the group consisting of metal foils, polymer films, metallized polymer films, electrically conductive polymer films, polymer films having an electrically conductive coating, electrically conductive polymer films having an electrically conductive metal coating, and polymer films having conductive particles dispersed therein.
20. (Original) The anode of claim 16, wherein said anode further comprises a multi-layered structure in contact with a surface of the anode active layer, on the side opposite to the substrate.
21. (New) An anode of an electrochemical cell, wherein the anode comprises:
  - (a) an anode active layer comprising lithium metal and lithium oxide; and
  - (b) a substrate.
22. (New) The anode of claim 21 wherein the lithium oxide is formed by co-deposition in-situ of lithium with one or more gaseous materials.

23. (New) The anode of claim 22 wherein the gaseous materials are selected from one or more of the group consisting of carbon dioxide, sulfur dioxide, alkyl sulfites, alkyl sulfates, and alkyl phosphates.
24. (New) The anode of claim 21, wherein the substrate is selected from the group consisting of metal foils, polymer films, metallized polymer films, electrically conductive polymer films, polymer films having an electrically conductive coating, electrically conductive polymer films having an electrically conductive metal coating, and polymer films having conductive particles dispersed therein.
25. (New) An electrochemical cell comprising:  
    (a) a cathode comprising an electroactive sulfur-containing material;  
    (b) an anode; and  
    (c) a non-aqueous electrolyte interposed between the anode and the cathode;  
    wherein the anode comprises an anode active layer, which anode active layer comprises lithium metal and lithium oxide.
26. (New) The cell of claim 25 wherein the lithium oxide is formed by co-deposition in-situ of lithium with one or more gaseous materials.
27. (New) The cell of claim 26, wherein the one or more gaseous materials are selected from one or more of the group consisting of carbon dioxide, acetylene, nitrogen, ethylene, sulfur dioxide, and hydrocarbons.
28. (New) The cell of claim 26, wherein said gaseous material is carbon dioxide.
29. (New) The cell of claim 25 wherein the electroactive sulfur-containing material comprises sulfur.

30. (New) A method of making an anode of an electrochemical cell in a vacuum chamber wherein the method comprises:
- (a) providing a moving substrate;
  - (b) moving the substrate consecutively past a lithium vapor deposition source, wherein the source is characterized by a nozzle through which lithium vapor is emitted;
  - (c) providing gaseous material adjacent to the lithium deposition nozzle; and
  - (d) condensing the lithium vapor of (b) on the substrate in presence of gaseous material to co-deposit a lithium anode active layer to form the anode.
31. (New) The method of claim 30, wherein the lithium vapor is condensed on the substrate by contacting the substrate with a cooled surface as the substrate passes through the vapor.
32. (New) The method of claim 30, wherein the thickness of the co-deposited lithium layer of the anode is from 1  $\mu\text{m}$  to 50  $\mu\text{m}$ .
33. (New) The method of claim 30, wherein the thickness of the co-deposited lithium layer of the anode is from 1  $\mu\text{m}$  to 15  $\mu\text{m}$ .
34. (New) The method of claim 30, wherein the substrate is selected from the group consisting of metal foils, polymer films, and metallized polymer films.
35. (New) The method of claim 34, wherein the polymer film is selected from the group consisting of films of polyethylene terephthalate, polyethylene naphthalate, 1,4-cyclohexanedimethylene terephthalate, polyethylene isophthalate, and polybutylene terephthalate.